Journal of Cellular Biochemistry

Volume 27, 1985

EDITORS

In the United States
C. FRED FOX
Molecular Biology Institute
University of California, Los Angeles

In Europe
MAX M. BURGER
Biozentrum der Universität Basel
Basel, Switzerland

ALAN R. LISS, INC.

© 1985 Alan R. Liss, Inc.
41 East 11th Street
New York, NY 10003

Contents

Volume 27, Number 1 **1985**

ARTICLES

Three Classes of Signalling Molecules on B-Cell Membranes, **Ronald B. Corley, N.J. LoCascio, Mariana Ovnic, Larry W. Arnold, P.S. Pillai, David. W. Scott, and Geoffrey Haughton** 1

Modulation of Type α Transforming Growth Factor Receptors by a Phorbol Ester Tumor Promoter, **Roger Davis, Betsy Like, and Joan Massagué** 23

Degradation of Extracellular Matrix by the Trophoblastic Cells of First-Trimester Human Placentas, **Susan J. Fisher, Mark S. Leitch, Marsha S. Kantor, Carol B. Basbaum, and Randall H. Kramer** 31

Evidence for the Evolutionary Relatedness of the Proteins of the Bacterial Phosphoenolpyruvate:Sugar Phosphotransferase System, **Milton H. Saier, Jr., Frank C. Grenier, Catherine A. Lee, and E. Bruce Waygood** 43

The Frequency of Bone Marrow Cells That Bind Erythropoietin, **Tania L. Weiss, Charles K.H. Kung, and Eugene Goldwasser** 57

INVITED REVIEW

Regulation of Gonadotropin Release, GnRH Receptors, and Gonadotrope Responsiveness: A Role for GnRH Receptor Microaggregation, **P. Michael Conn, Deloris C. Rogers, Sallie G. Seay, Hyder Jinnah, Michael Bates, and Diana Luscher** 13

Volume 27, Number 2 **1985**

ARTICLES

PDGF Stimulates Transient Phosphorylation of 180,000 Dalton Protein, **Maureen A. Harrington, John E. Estes, Edward Leof, and W. Jack Pledger** 67

Solubilization, Reconstitution, and Attempted Affinity Chromatography of the Sugar Transporter of the Erythrocyte Membrane, **Jakob Weber, Dean Allan Warden, Giorgio Semenza, and Donald F. Diedrich** 83

Comparisons of Evolutionarily Distinct Fibronectins: Evidence for the Origin of Plasma and Fibroblast Cellular Fibronectins From a Single Gene, **Steven K. Akiyama and Kenneth M. Yamada** 97

Metabolic Properties of an Azaguanine-Resistant Variant of Chinese Hamster Ovary Cells ($aza^r ts$) With Normal Levels of Hypoxanthine-Guanine Phosphoribosyltransferase Activity, **Peter G.W. Plagemann and Robert M. Wohlhueter** 109

Production of a Monoclonal Antibody Directed Against the Nerve Growth Factor Receptor From Sympathetic Membranes, **Claudia J. Morgan and Ralph A. Bradshaw** 121

The Structure of a Small Collagenous Fragment Isolated From Chicken Hyaline Cartilage, **Richard Mayne, Michel van der Rest, Darrel C. Weaver, and William T. Butler** . . 133

Stimulation of pp60$^{c\text{-}src}$ Tyrosyl Kinase Activity in Polyoma Virus-Infected Mouse Cells is Closely Associated With Polyoma Middle Tumor Antigen Synthesis, **Joseph B. Bolen, Andrew M. Lewis, Jr, and Mark A. Israel** 157

A 38 Base Pair Insertion in the Proα2(I) Collagen Gene of a Patient With Marfan Syndrome, **Elizabeth Henke, Mark Leader, Shingo Tajima, Sheldon Pinnell, and Russel Kaufman** 169

Liver Tyrosine Kinase Activation During Early Stages of Chemical Hepatocarcinogenesis, **Jack W. Olson** 175

Domain Structure of Neurofilament Subunits as Revealed by Monoclonal Antibodies, **Ruth Hogue Angeletti, John Q. Trojanowski, Martin Carden, William W. Schlaepfer, and Virginia M.-Y. Lee** 181

INVITED REVIEW

Matrix-Cytoskeletal Interactions in the Developing Eye, **Elizabeth D. Hay** 143

Volume 27, Number 3 **1985**

ARTICLES

How Do the Migratory and Adhesive Properties of the Neural Crest Govern Ganglia Formation in the Avian Peripheral Nervous System? **Jean Loup Duband, Gordon C. Tucker, Thomas J. Poole, Michel Vincent, Hirohiko Aoyama, and Jean Paul Thiery** 189

The Differential Distribution of Beta Tubulin mRNAs in Individual Mammalian Brain Cells, **W. Sue T. Griffin, Michael A. Alejos, Erica J. Cox, and Marcelle R. Morrison** . . . 205

Intracellular Features of Type II Procollagen and Chondroitin Sulfate Proteoglycan Synthesis in Chondrocytes, **Barbara M. Vertel, Linda L. Barkman, and Jeffrey J. Morrell** 215

Down-Regulation of Gonadotropin and β-Adrenergic Receptors by Hormones and Cyclic AMP, **Peter H. Fishman, R. Victor Rebois, and Terrye Zaremba** 231

Membrane-Cytoskeleton Interactions and the Regulation of Chemotactic Peptide-Induced Activation of Human Granulocytes: The Effects of Dihydrocytochalasin B, **Algirdas J. Jesaitis, James O. Tolley, Richard G. Painter, Larry A. Sklar, and Charles G. Cochrane** 241

Phospholipid and Ca^{++} Dependency of Phorbol Ester Receptors, **Bernhard König, Patricia A. Di Nitto, and Peter M. Blumberg** 255

Activators of Protein Kinase C and 5-Azacytidine Induce IL-2 Receptor Expression on Human T Lymphocytes, **Joel M. Depper, Warren J. Leonard, Cynthia L. Drogula, Martin Krönke, Thomas A. Waldmann, and Warner C. Greene** 267

Direct Evidence for the Interaction of Platelet Surface Membrane Proteins GPIIb and III With Cytoskeletal Components: Protein Crosslinking Studies, **Richard G. Painter, William Gaarde, and Mark H. Ginsberg** 277

Purification and Partial Characterization of a Liver Cell Proliferation Factor Called Hepatopoietin, **Michel Goldberg** 291

Immunopurification, Characterization, and Nature of Membrane Association of Human Melanoma-Associated Oncofetal Antigen gp87 Defined by Monoclonal Antibody 140.240, **Shuen-Kuei Liao, Pak C. Kwong, and Mohammed J. Khosravi** 303

Volume 27, Number 4 **1985**

ARTICLES

Basement Membrane Component Changes in Skeletal Muscle Transplants Undergoing Regeneration or Rejection, **Adarsh K. Gulati** 337

Further Biochemical and Physicochemical Characterization of Minor Disulfide-Bonded (Type IX) Collagen, Extracted From Foetal Calf Cartilage, **Sylvie Ricard-Blum, Jérôme Tiollier, Robert Garrone, and Daniel Herbage** 347

Formyl Peptide Chemotaxis Receptors on the Rat Neutrophil: Experimental Evidence for Negative Cooperativity, **Wayne A. Marasco, Douglas E. Feltner, and Peter A. Ward** 359

Transferrin Receptor Induction Is Required for Human B-Lymphocyte Activation but not for Immunoglobulin Secretion, **L.M. Neckers, G. Yenokida, J.B. Trepel, E. Lipford, and S. James** 377

Regulation of Discoidin I Gene Expression in Dictyostelium discoideum by Cell-Cell Contact and cAMP, **Edward A. Berger, Donna M. Bozzone, Marcia B. Berman, Jennifer A. Morgenthaler, and Judy M. Clark** 391

Cellular Responses Elicited by Insulin Mimickers in Cells Lacking Detectable Plasma Membrane Insulin Receptors, **Cecilia Hofmann, Marco Crettaz, Pamela Bruns, Patricia Hessel, and Gina Hadawi** 401

In Situ Hybridization of Putative Somatostatin mRNA Within Hypothalamus of the Rat Using Synthetic Oligonucleotide Probes, **Rene Arentzen, Frank Baldino, Jr., Leonard G. Davis, Gerald A. Higgins, Yuan Lin, Robert W. Manning, and Betty Wolfson** 415

A β-Type Transforming Growth Factor, Present in Conditioned Cell Culture Medium Independent of Cell Transformation, May Derive From Serum, **Kurt Stromberg and Daniel R. Twardzik** 443

Stimulation of Phospholipase A_2 Activity by Oxygen-Derived Free Radicals in Isolated Brain Capillaries, **A.M. Au, P.H. Chan, and R.A. Fishman** 449

INVITED REVIEWS

Biological Activities of Laminin, **Hynda K. Kleinman, Frances B. Cannon, Gordon W. Laurie, John R. Hassell, Monique Aumailley, Victor P. Terranova, George R. Martin, and Monique DuBois-Dalcq** 317

Proteoglycans: An Overview, **Klaus E. Kuettner and James H. Kimura** 327

Expression and Assembly of the Erythroid Membrane-Skeletal Proteins Ankyrin (Goblin) and Spectrin in the Morphogenesis of Chicken Neurons, **Elias Lazarides and W. James Nelson** 423

Author Index to Volume 27 455

Subject Index to Volume 27 457